

Amendments to the Specification:

Please replace paragraph [0102] with the following amended paragraph:

[0102] $L = (3 \cdot R + 6 \cdot G + 1 \cdot B) / 10$

At step ~~S33~~S83, the histogram stored in the histogram holding section 5 is updated. The histogram holding section 5 holds a histogram HistL having the luminance L above calculated; HistR, HistG, and HistB that store the cumulative luminance values of respective R, G, and B colors by luminance L of the pertinent pixel; and a histogram HistLMSk having a luminance L, for a region masked by mask data. Any initial state is 0. The updating of histograms is performed by the following expressions.

$$\text{HistR}[L] = \text{HistR}[L] + R$$

$$\text{HistG}[L] = \text{HistG}[L] + G$$

$$\text{HistB}[L] = \text{HistB}[L] + B$$

$$\text{HistL}[L] = \text{HistL}[L] + 1$$